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|  | **SOUTH DAKOTA BOARD OF REGENTS**ACADEMIC AFFAIRS FORMS |
| Existing Courses: Minor Modifications |
|  |  |

Use this form to request minor modifications of existing unique and common courses. Consult the system course database for information about existing courses before submitting this form. If the course revision is for an approved General Education course, please see the Revision to General Education Requirements Form.

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| --- | --- | --- | --- | --- | --- | --- |
| DSU |  | Computer and Cyber Sciences |  | Yong Wang |  | 4/17/2023 |
| **Institution** |  | **Division/Department** |  | **Originator** |  | **Date** |
|  |  |  |  |  |  |  |
| Pat Engebretson |  | The Beacom College |  | Pat Engebretson |  | 4/19/2023 |
| **Department Chair** |  | **School/College Dean** |  | **Institutional Approval Signature** |  | **Date** |

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**Section 1. Existing Course Title and Description**

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| --- | --- | --- |
| **Prefix & No.** | **Course Title** | **Credits** |
| CSC 848 | Advanced Software Exploitation | 3 |

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| --- | --- |
| **Effective Date:** | Click here to enter a date. |

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| **This course is a (*Place an “X” in the appropriate box*):** |
|[x]  **Unique Course (see section 2)** |  |[ ]  **Common Course (see section 3)** |

**Section 2. Unique Courses: Requested Minor Modifications**

***Place an “X” in the appropriate boxes*.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **Current** |  | **New** |
|[ ]  **Prefix change**  |  | to |  |

|  |  |  |  |
| --- | --- | --- | --- |
|[ ]  **Course Number change**  |  | to |  |

*NOTE: You may only change a unique course number to a number not currently used in “active” status at another university. Consult the system database.*

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| --- | --- | --- | --- |
|[ ]  **Credit hours**  |  | to |  |

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| --- | --- | --- | --- |
|[ ]  **Course pre-requisites**  |  | to |  |

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| --- | --- | --- | --- |
|[ ]  **Course co-requisites**  |  | to |  |

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| --- | --- | --- | --- |
|[ ]  **Registration restriction**  |  | to |  |

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| --- | --- | --- | --- |
|[ ]  **Enrollment limitation**  |  | to |  |

|  |  |  |  |
| --- | --- | --- | --- |
|[ ]  **Repeatable for additional credit** |  | to |  |

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| --- | --- | --- | --- |
|[ ]  **Grading option**  |  | to |  |

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| --- | --- |
|[ ]  **Course title change** |  |

*NOTE: The Enrollment Services Center assigns the short, abbreviated course title that appears on transcripts. The short title is limited to 30 characters (including spaces); meaningful but concise titles are encouraged due to space limitations in the student information system.*

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|[ ]  **Cross-listing and equating with** |  |

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| --- |
|[ ]  **Dual-listing at 400/500 level** |

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| --- |
|[x]  **Course description (that does not change course content). Complete table below:** |

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| *Existing description:* |
| This course covers advanced techniques used in malware analysis. Topics will focus heavily on static analysis of unknown binaries utilizing reverse engineering tools and procedures. The course will also cover advanced anti-malware analysis processes such as: Anti-reverse engineering methods and advanced obfuscation practices employing packers and anti-debugging processes. A solid understanding of x96 assembly language and a familiarity of IDA pro are suggested. |

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| *New description:* |
| This course is designed to expose students to advanced topics in the field of binary exploitation, particularly in the context of complex targets such as browsers and kernels. Course work will focus on vulnerabilities in real software products, utilizing modern exploitation techniques. Students entering this class should have strong knowledge of C programming, assembly programming, binary exploitation principles, and exploit mitigations. |
| Note: Course descriptions are short, concise summaries that typically do not exceed 75 words. DO: Address the content of the course and write descriptions using active verbs (e.g., explore, learn, develop, etc.). DO NOT: Repeat the title of the course, layout the syllabus, use pronouns such as “we” and “you,” or rely on specialized jargon, vague phrases, or clichés. |

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|[ ]  **Add course in x9x series** |
| *CIP Code:* |  |

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| *New CIP Code for this university?* |  |[ ]  Yes |[ ]  No |

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| --- |
| *Will this university’s sections of the course be limited to S/U (pass/fail)?* |

|  |  |  |
| --- | --- | --- |
|  |[ ]  Yes |[ ]  No |

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| --- | --- |
|[ ]  **Delete Course (effective date):** | Click here to enter a date. |

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| **Justification for changes indicated in Section 2:** |
| The new description provides a better summary of the topics discussed in the class and the skills the students need to have when taking the class. |

**Section 3. Common Courses: Requested Minor Modifications**

***Place an “X” in the appropriate boxes*.**

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| --- | --- | --- | --- | --- |
|  |  | **Current** |  | **New** |
|[ ]  **Credit hours (within variable limits)**  |  | to |  |

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| --- | --- | --- | --- |
|[ ]  **University specific co-requisites**  |  | to |  |

|  |  |
| --- | --- |
|[ ]  **Cross-listing and equating with** |  |

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| --- |
|[ ]  **Dual-listing at 400/500 level** |

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| --- |
|[ ]  **Add course in x9x series** |
| *CIP Code:* |  |

|  |  |  |
| --- | --- | --- |
| *New CIP Code for this university?* |[ ]  Yes |[ ]  No |

|  |
| --- |
| *Will this university’s sections of the course be limited to S/U (pass/fail)?* |

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| --- | --- | --- |
|  |[ ]  Yes |[ ]  No |

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|[ ]  **x9x grading method**  |  | to |  |

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| **Justification for changes indicated in Section 3:** |
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**Section 4. Department and Course Codes (Completed by University Academic Affairs)**

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| 1. **University department code:**
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| 1. **Banner department code:**
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| --- | --- |
| 1. **Change university department code to:**
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